

**SYSTEM AND METHOD TO ESTABLISH AN ADJUSTABLE ON-CHIP IMPEDANCE**

ABSTRACT OF THE DISCLOSURE

5       A method to establish an adjustable on-chip impedance within  
a predetermined range that involves establishing a reference  
current for the adjustable on-chip impedance and applying this  
reference current to the adjustable on-chip impedance. A voltage  
produced by applying the reference current to the adjustable on-  
chip impedance is sensed and compared with the comparator or  
10   other similar processor to a reference voltage. This comparison  
allows the adjustable on-chip impedance to be tuned when the  
comparison of the sense voltage and the reference voltage is  
unfavorable. Tuning the impedance results in an impedance value  
within a predetermined range that accounts for variances of both  
15   the reference current and reference voltage.